

IN THE CLAIMS:

1 1. (Currently Amended) A method of self-aligning connections for a two section mast,
2 which method comprises:

3 transporting an elongated bottom mast section to a guide frame adjacent to a well site,
4 said bottom mast section having a pair of front legs and a pair of rear legs so that said bottom mast
5 section is in a substantially horizontal orientation;

6 transporting an elongated top mast section to said well site so that said top mast
7 section is in a substantially horizontal orientation and so that said mast sections are aligned, said top
8 mast section having a pair of front legs and a pair of rear legs;

9 positioning said legs of said bottom mast section slightly below a level of said legs
10 of said top mast section; ~~and~~

11 raising said bottom mast section ~~in order to engage said top mast section while; and~~
12 simultaneously engaging and aligning the mast sections together in the final
13 connecting orientation.

1 2. (Original) A method of self-aligning connections as set forth in Claim 1 wherein said
2 bottom mast section is raised by cylinders on mast stands.

1 3. (Original) A method of self-aligning connections as set forth in Claim 2 wherein said
2 cylinders are powered by a rig hydraulic system.

1 4. (Original) A method of self-aligning connections as set forth in Claim 1 wherein said
2 legs of said bottom mast section are positioned slightly below a level of said legs of said top mast
3 section by lowering said bottom mast section before said raising step.

1 5. (Original) A method of self-aligning connections as set forth in Claim 1 including
2 the additional step of pinning said top mast section to said bottom mast section.

1 6. (Original) A method of self-aligning connections as set forth in Claim 1 wherein said
2 bottom mast section and said top mast section are each transported on a vehicle in a horizontal
3 orientation prior to a vertical use orientation.

1 7. (Original) A method of self-aligning connections as set forth in Claim 1 wherein said
2 legs of said bottom mast section are positioned by cylinders on said mast stands.

1 8. (Original) A method of self-aligning connections as set forth in Claim 1 wherein said
2 pair of top mast front legs each include a pair of protruding circular plates which engage and align
3 with said pair of bottom mast front legs which each include an alignment jaw with a pair of hooks.

1 9. (Original) A method of self-aligning connections as set forth in Claim 1 wherein said
2 pair of top mast rear legs each include a jaw with a shoulder which engage and align with said pair
3 of bottom mast rear legs which each include a jaw with protruding semi-circular plates.

1 10. (Original) A method of self-aligning connections as set forth in Claim 9 wherein
2 each said shoulder includes a radial face to receive said circular plates.

1 11. (Original) A method of self-aligning connections as set forth in Claim 1 wherein said
2 steps are performed in reverse order to disassemble said two section mast.

1 12. (Currently Amended) A two section mast with self-aligning connections, which mast
2 comprises:

3 an elongated bottom mast section having a pair of front legs and a pair of rear legs
4 arranged in a substantially horizontal arrangement;

5 an elongated top mast section having a pair of front legs and a pair of rear legs
6 arranged in a substantially horizontal arrangement;

7 a self-aligning connection between said mast sections wherein said pair of top mast
8 front legs each include a pair of protruding circular plates, each said pair of plates engage and align
9 with a jaw with a pair of hooks extending from each said bottom mast front leg and wherein said pair
10 of top mast rear legs each include a jaw with a shoulder, each said jaw engaging and aligning with
11 a jaw with protruding semi-circular plates extending from each bottom mast rear leg; and

12 at least one hydraulic cylinder on a mast stand to move said legs of said bottom
13 section from a position slightly below a level of said legs of said top mast section to an engaged
14 position in which the mast sections are in the final connecting orientation.

1 13. (Canceled)

1 14. (Original) A two section mast as set forth in Claim 12 including a pin passing
2 through each said jaw of said bottom mast front legs and through each said pair of protruding
3 circular plates of said top mast front legs.

1 15. (Original) A two section mast as set forth in Claim 12 including a pin passing
2 through each said jaw with a shoulder of said top mast rear legs and through each said jaw with
3 protruding semi-circular plates of said bottom mast rear legs.